Ross' Precision Health & Fitness Newsletter
Issue #5 – 12/16/2006 – Holiday Beverages and Exercise

It's hard to believe the year is coming to an end and this is the final newsletter of 2006. This issue is a little different than previous ones, because it focuses on two different topics instead of having one central theme. The article focuses on exercise and is the conclusion of last issue's article, while the first part of the newsletter will deal with nutrition.

Since you probably have a number of gatherings or parties to attend over the next couple weeks, I wanted to address a potential nutritional hazard that could undo much your recent progress: beverages, especially ones containing alcohol.

In can be easy to forget that many beverages contain a significant amount of calories. One of the worst offenders is the traditional holiday beverage eggnog. Just one glass of eggnog often contains 500 calories, so if you have a glass at 3 or 4 different times during the holidays, you are basically adding half a pound of fat to your body.

Adding a large number of calories to your daily total is bad enough, but when these beverages are consumed at mealtimes, the negative effects on fat storage and weight gain become even greater. When the calories from your food alone are enough to satisfy your body's energy requirements, the extra calories from beverages will end up being stored as fat, regardless if they are calories from fat, carbs, or protein.

In addition, when a beverage contains alcohol, the effects on fat storage are even worse. Alcohol is essentially a toxin and when you drink alcohol, your body reprioritizes how it handles the calories you consume. Normally, your body will break down some of the proteins, fats, and carbs to use as energy for various physiological functions. Then whatever is left over will generally be converted into fat or stored as glycogen.

When alcohol is consumed with the other calories, your body's first priority becomes to process the alcohol (toxin) and get it out of your body as fast as possible. The problem is the normal process of breaking down the other carbs, fats, and proteins becomes less important and more of these calories end up being stored as fat while the body is processing the alcohol.

This isn't to say that having a small glass of wine with your meal will make everything you eat turn to fat. Instead, higher amounts of alcohol consumed with food will cause your body to store a higher percentage of the calories as fat. Plus, since alcohol has a dehydrating effect, if you don't drink enough water, it will be more difficult to detoxify your body. This is also important, because when it takes longer to process the alcohol, more of the other calories will be stored as fat.

The physiology can become confusing, but simply stated, large meals combined with alcoholic beverages will cause your body to store a lot of unnecessary fat. Of course, you will have to get rid of this newly added fat before making positive progress towards your health and fitness goals, so you have to ask yourself what's more important, reaching your goals or consuming excess amounts of alcohol or other high calorie beverages?

I am confident that with a little effort and self-restraint, you will be able to make smart decisions during your holiday celebrations. With that said, here is the conclusion to the article from the previous newsletter.

Featured Article

Prioritizing Workouts: Creating Efficient Workouts to Maximize Your Results Part 2

If you have not done so already, please read part 1 of this article before continuing. Part 2 follows the same philosophy introduced in part 1, discussing how to maximize specific training adaptations when your amount of training decreases, such as during the holidays or while you are traveling.

Endurance

Endurance training is important because it helps increase stamina and improve cardiovascular health. When you think about endurance exercise, you may think about a particular activity or type of activity, but endurance training can take many different forms. It could be training to improve the number of times you can lift a weight, distance you can sprint before you have to stop and rest, or amount of time you can swim without a significant decrease in speed.

However in most cases, people consider endurance training to be a continuous repetitive aerobic activity, such as walking/running or biking. Since this is the most common view of endurance training it will be the focus of this section. Also, as a reminder, this is not about how to design a great endurance training program, but rather what you should do if endurance training is an important part of your routine and you have to decrease your time spent exercising.

Maintaining or improving endurance during decreased training periods is a good news and bad news scenario. The bad news is that endurance training is really dependent on higher volume training and if you decrease the amount you exercise, it is very difficult to make any endurance related improvements.

The good news is endurance improvements you have already made are fairly resistant to declines, so you should be able to maintain most of your abilities while exercising less. In addition, decreasing your endurance training from time to time can actually be beneficial over the long run. This is because many endurance athletes exercise too much and some of their muscles and joints suffer overuse related symptoms. In these situations, exercising less will give your body some much needed time to recover and allow you to train harder when you resume your higher volume training.

As with other forms of training, the type of program you perform during your limited training times will depend on your goals. If you mainly perform endurance training for general health, you should focus on the number of exercise sessions instead of the actual length of each session. If you normally run for an hour, can cut it back to 30 minutes and run a little faster or increase

the difficulty of the exercise. For example, you could run in a hilly area, increase the incline on a treadmill, or increase the resistance on an exercise bike.

If your focus is on increasing your aerobic capacity or participating in a long endurance event, such as a marathon or triathlon, having longer workouts is more important than exercising for general health. In these situations, you should still incorporate longer workouts into you schedule as much as possible.

It is also a good idea to perform a long and challenging workout right before your scheduling issues start. For example if you usually perform your longest workout on Saturday and are leaving town on Wednesday, move your long workout to Tuesday and make the previous workouts a little easier.

There is also another training approach which involves increasing the difficulty of all your workouts a week or two before and use your decreased training period as planned recovery time. This is a more advanced technique and should only be used if you have exercised for a long time and understand of how hard you can push yourself and still recover.

Endurance training typically requires more time or at least larger chunks of time than other types of exercise, but using these strategies will help preserve the benefits you worked so hard to achieve.

Strength

Strength training is much more than lifting the heaviest weights possible. Any training designed to help you perform more difficult tasks or perform daily activities more easily is in essence strength training. Strength training is used to correct muscle imbalances, improve performance in physical activities, improve stability and joint health, and much more. For these reasons, some form of strength training should be included in everyone's exercise program.

This section of the article will focus specifically on training to improve your overall level of strength (the amount of force your muscles can exert). Strength as it applies to stability and joint health or muscle imbalances is discussed briefly in the next section.

The basic approach to improving strength involves repeatedly exposing your muscle to a stimulus (e.g. weight) that is challenging, but not overwhelming. The stimulus results in your muscles adapting and strengthening over time. In general the greater number of times a muscle is exposed to challenging resistances, the faster it will increase in strength. Of course, if you work a muscle too hard or too often, it will not fully recover and could become injured.

Now back to the original issue of training to maintain or possibly even increase strength when you are exercising less. Strength improvements are strongly influenced by the overall amount of exercise. Training to increase strength when exercising less will generally only happen if you have little experience with strength training and your improvements are mainly due to neurological improvements (e.g. increasing neurological efficiency).

For everyone else, the goal is to maintain as much of your current strength as possible and focus on increasing your strength when you have more time to exercise. The good news is the approach is relatively simple, but the bad news is it can be difficult to implement, especially if you are traveling. The whole approach is based on exercising with the same intensity and just decreasing your overall number of sets.

For example, if you perform 3-5 sets of a particular exercise with 50 pounds, you should keep the weight at 50 pounds and you can decrease the sets to 1-2. If you keep the number of sets and lower the weight instead, you will probably lose some strength as well. Any time your muscles are not exposed to challenging levels of stress (weight) for extended periods of time, they will become weaker. This can happen in as little as a week or two and it often takes more time to regain your strength than it does to lose it.

If you are experienced in strength training, you can even increase the weights during the exercise to have a greater chance of preventing strength declines. Since your overall exercise volume (reps X sets X weight) will be lower, you can push yourself harder during the few sets you are performing. However, if you are inexperienced or increase the weight too much, this can be dangerous and result in overtraining or injury to your muscles and joints.

Of course the big problem is making sure you have access to equipment that will provide the intensity you need. If this is not possible, the next best thing is to keep a similar level of intensity by using less weight and performing more difficult exercises. If you normally lift a heavy weight that becomes difficult around 8-10 reps on a basic exercise, perform more challenging exercises that still become difficult after 8-10 reps, but require much less weight for this to occur.

For example if you usually perform standard grip bench presses, you can substitute 1-arm dumbbell flys instead. There may even be some exercises that become difficult in the same rep range without any weight at all. In this example, you could perform close grip push-ups with your feet elevated. There are many options for each muscle group. Just consider the equipment you will have and do the best you can.

All of these changes will help minimize strength decreases, but even if you can't incorporate these chances into your own program, make a commitment to perform some resistance exercises, because any resistance training will result in less strength loss than not exercising at all.

Injury Prevention/Rehab

Injury prevention and rehabilitation exercises are important, because they help maintain well-functioning muscles and joints throughout your lifetime. This section was originally going to have a similar format to the previous ones, but since everyone has different strengths and weaknesses, it is not possible to give specific advice about different training programs or exercises. Instead I will present some basic information and advice.

Injury prevention/rehab training involves a combination of strength, flexibility, balance, and stabilization exercises. Strength and flexibility training are used together to correct muscle imbalances, balance training is used to improve your awareness of your body's movements, and

stabilization training is used to improve joint health by minimizing external forces and pressures on your joints. Since flexibility was covered in part 1, I will only discuss the other 3 components.

Injury prevention/rehab training typically has 2 common characteristics. The exercises are performed with light or no weights and the number of reps is kept high (15+). Since there are minimal equipment requirements and the intensity is low, these exercises are relatively easy to include into any training program, even if you are traveling or don't have large blocks of free time available for training.

In addition, you need less time to warm-up for this type of exercises and in many cases you can even use these exercise as warm-up or cool-down exercises for your regular workouts. As with stretching, these exercises can be done 1 or 2 at a time throughout the day. This is because the focus is on improving specific muscle, joint, or body awareness characteristics instead of creating large-scale physiological adaptations, such as increasing overall strength or endurance.

Of course to really benefit from injury prevention/rehab training, you have to understand your weaknesses and know which exercises are designed to improve them. Unfortunately recommending specific exercises can only be done on an individual basis, so I will not make any recommendations at this time. If you have any specific questions about which exercises you should perform, please let me know.

Final Thoughts

This article includes information about various types of exercise and while ideally you should include some of each training type into your routine, the point of this article is to help you determine the training that is most important to you and give you suggestions on how to make it more of a priority in your overall program.

This information is not meant to be a template for creating a complete year-round program. A complete program would take a much different approach than is discussed in the article. As the title says, this is all about prioritizing your exercise, especially for short periods of time, and should be thought of as a way to make the best out of difficult training, schedule, or traveling situations.

WRAP UP:

Well that's it for this year. I hope you enjoyed the first five issues and more importantly been able to utilize the information to improve your own health and fitness. For the next newsletter (1/1/07), I will cover New Year's resolutions and setting yourself up for success throughout the year.

Until then, keep up the good work and I wish you all a happy, healthy, and safe holiday season.

Ross